



Direct-acting 3/2-way plunger valve

- Direct-acting and compact small valve up to DN 1.6
- Slipped over coil system
- Banjo fitting for direct mounting on pneumatic valves
- Simple and fast push-in, flange or manifold mounting
- Explosion-proof variants



Product variants described in the data sheet may differ from the product presentation and description.

Type description

The 7012 valve is a direct-acting plunger valve. The stopper and the core guide tube are welded together to increase pressure resistance and leak-tightness. Various housing and seal material combinations are available depending on the actual application. A Bürkert-specific flange variant (SFB) enables the space-saving arrangement of valves on a multiple manifold. The range is supplemented by explosion-proof variants. Push-in fittings can be selected for a flexible hose connection. A banjo fitting with banjo bolt is the ideal solution for easy direct mounting on a pneumatic actuator. Optional manual override enables quick start-up and optimal maintenance. In combination with a plug to industry standard shape B or DIN EN 17301 - 803 shape C, the valves satisfy degree of protection IP65.

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1. General technical data

1.1. Standard and banjo version

Product properties	
Dimensions	Detailed information can be found in chapter "5. Dimensions" on page 7.
Material	
Seal	FKM, EPDM
Body	Brass, polyamide (PA), stainless steel 1.4305/303
Manual override	Optional, standard for Type 7012 banjo version
Weight	
Standard version 24.5 mm solenoid coil	5 ¼ oz (with NPT ⅝)
Standard version 20 mm solenoid coil	4 ¼ oz (with NPT ⅝)
Banjo version	4 ¾ oz
Circuit function	C and D. Detailed information can be found in chapter "2. Circuit functions" on page 4.
Thermal insulation class of solenoid coil	Epoxy: class H
Performance data	
Duty cycle	
Single valve	Continuous operation 100 % ED resp. 50 % ED
For block mounting on multiple manifold	With 4 W/5 W solenoid coil 100 % ED (at max. 131 °F)
Switching time^{1.)}	
Standard version	Orifice 1.2...1.6 mm: opening 8...12 ms, closing 8...12 ms
Banjo version	Orifice 1.2 mm: opening 7...12 ms, closing 7...12 ms
Electrical data	
Operating voltage	24 DC, 24 V/50 Hz, 24 V/60 Hz, 110 V/50 Hz, 120 V/60 Hz, 230 V/50 Hz, 240 V/60 Hz
Voltage tolerance	± 10 %
Medium data	
Operating medium	Neutral gases and fluids (e.g. compressed air, water, hydraulic oil, technical vacuum)
Medium temperature	
Standard version	+ 14 °F...+ 212 °F
Banjo version	+ 14 °C...+ 140 °F
Viscosity	Max. 21 cSt
Process/Port connection & communication	
Electrical connection	<ul style="list-style-type: none"> • Acc. to DIN EN 175301 - 803 form C for cable plug Type 2516 • Acc. to industry standard form B for cable plug Type 2507 • Flat pin terminal as protection class III device • Flying leads connection on request for coil size 20 mm
Port connection	
Standard version	M5, G ⅝, NPT ⅝, Flange
Banjo version	G ⅝, G ¼, NPT ⅝, NPT ¼ and hose connector Ø 6 mm
Approvals and certificates	
Degree of protection	IP65 with cable plug
Environment and installation	
Installation position	As required, preferably with actuator upright
Ambient temperature	
Standard version	Max. + 131 °F resp. 167 °F, depending on power level
Banjo version	+ 14 °F...+ 104 °F

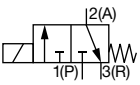
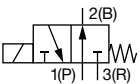
1.) Measurement at 87 psi and + 68 °F at the valve outlet acc. to DIN ISO 12238:2001, opening: pressure build-up 0...10 %, closing: pressure reduction 100...90 %

1.2. ATEX-/IECEx cable version

Product properties	
Material	
Seal	FKM, EPDM
Body	Brass, stainless steel 1.4305/303
Connection	
Thread	G 1/8, NPT 1/8, RC1/8, M5, UNF 10-32
Flange	Flange "FK01"
Circuit function	A and B
Available coil size	SG3 (24.5 mm width)
Performance data	
Operating pressure	Up to 34 bar (depending on orifice and coil power)
Medium data	
Operating medium	Neutral gases and fluids (e.g. compressed air, water, hydraulic oil, technical vacuum)
Medium temperature^{1.)}	
FKM	-10 °C...+100 °C
EPDM	-30 °C...+100 °C
Process/Port connection & communication	
Electrical connection	ATEX-/IECEx cable version with 3 m moulded-in cable
Approvals and certificates	
Approvals	ATEX: EPS 21 ATEX 1 128 X II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T130 °C Db IECEx: IECEx EPS 21.0045X Ex mb IIC T4 Gb Ex mb IIIC T130 °C Db Fixed cable is halogen-free according to IEC 60754 - 1 Detailed information can be found in chapter "3. Approvals" on page 5.
Degree of protection	IP65 with cable plug and ATEX-/IECEx cable version
Environment and installation	
Ambient temperature^{1.)}	
FKM	-10 °C...+55 °C (max. +60 °C on request)
EPDM	-30 °C...+55 °C (max. +60 °C on request)

1.) The minimum temperature depends on the seal material.

2. Circuit functions

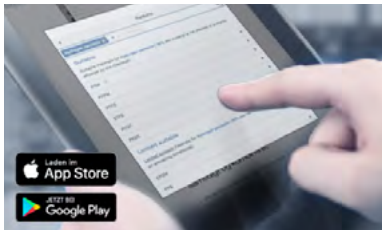
Symbol	Description
	Circuit function C (CF C) 3/2-way solenoid valve Direct-acting Normally closed
	Circuit function D (CF D) 3/2-way solenoid valve Direct-acting Normally open

3. Approvals

Approvals	Description
	ATEX and IECEx approval for coils with fixed cable outlet
	ATEX: EPS 21 ATEX 1 128 X II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T130 °C Db IECEx: IECEx EPS 21.0045X Ex mb IIC T4 Gb Ex mb IIIC T130 °C Db

4. Materials

4.1. Chemical Resistance Chart – Bürkert resistApp



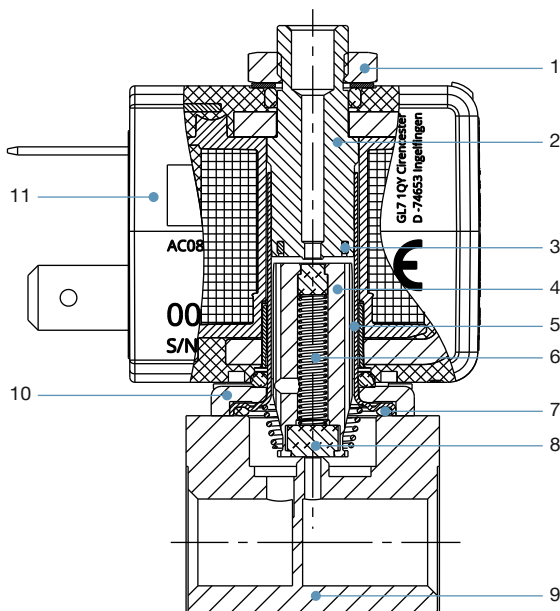
Bürkert resistApp – Chemical Resistance Chart

You want to ensure the reliability and durability of the materials in your individual application case? Verify your combination of media and materials on our website or in our resistApp.

Start Chemical Resistance Check

4.2. Material specifications

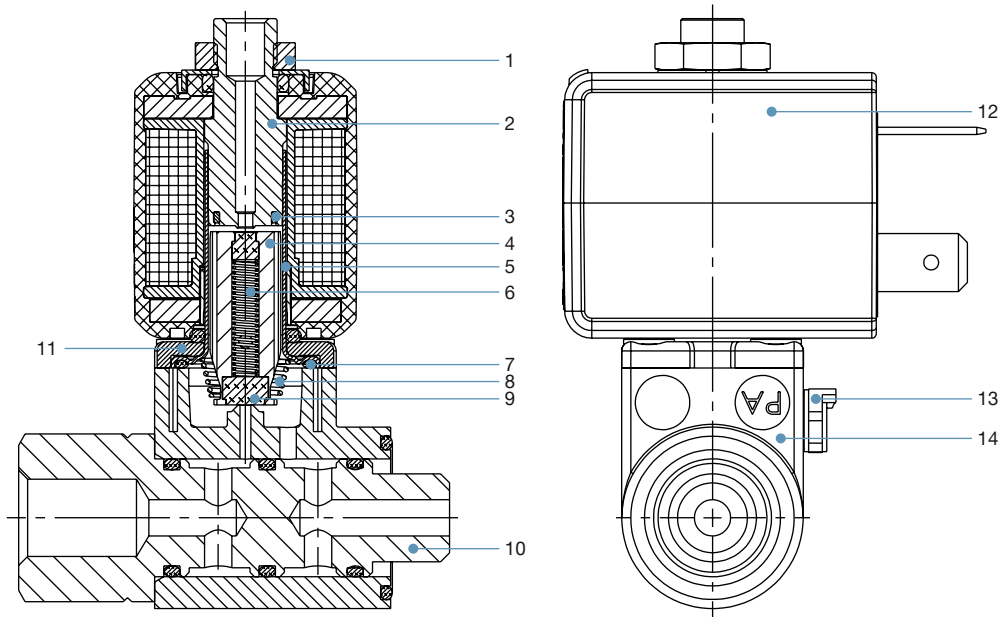
Standard version



No.	Element	Material
1	Locknut	DIN 176 Surface finish thick film passivated KOSA0101
2	Stopper	Stainless steel 1.4113/434
3	Shading ring	Copper (silver optional)
4	Core	Stainless steel 1.4113/434
5	Guide tube	Stainless steel 1.4303/305L
6	Spring	Stainless steel 1.4310/301
7	O-ring	FKM/EPDM
8	Seal	FKM/EPDM
9	Valve body	Brass, stainless steel 1.4305/303 PA (polyamide)
10	Flange	<ul style="list-style-type: none"> Surface finish thick film passivated KOSA0101 (brass version) Nickel-plated surface (stainless steel version)
11	Coil	Epoxy

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Banjo version



No.	Element	Material
1	Locknut	DIN 176 Surface finish thick film passivated KOSA0101
2	Stopper	Stainless steel 1.4113
3	Shading ring	Copper (silver optional)
4	Core	Stainless steel 1.4113
5	Guide tube	Stainless steel 1.4303 ST
6	Spring	Stainless steel 1.4310
7	O-ring	FKM
8	Spring	Stainless steel 1.4310
9	Seal	FKM
10	Banjo bolt	Nickel-plated brass
11	Flange	<ul style="list-style-type: none"> Surface finish thick film passivated KOSA0101 (brass version) Nickel-plated surface (stainless steel version)
12	Coil	Epoxy
13	Manual override	Durethan
14	Body	PA (polyamide)

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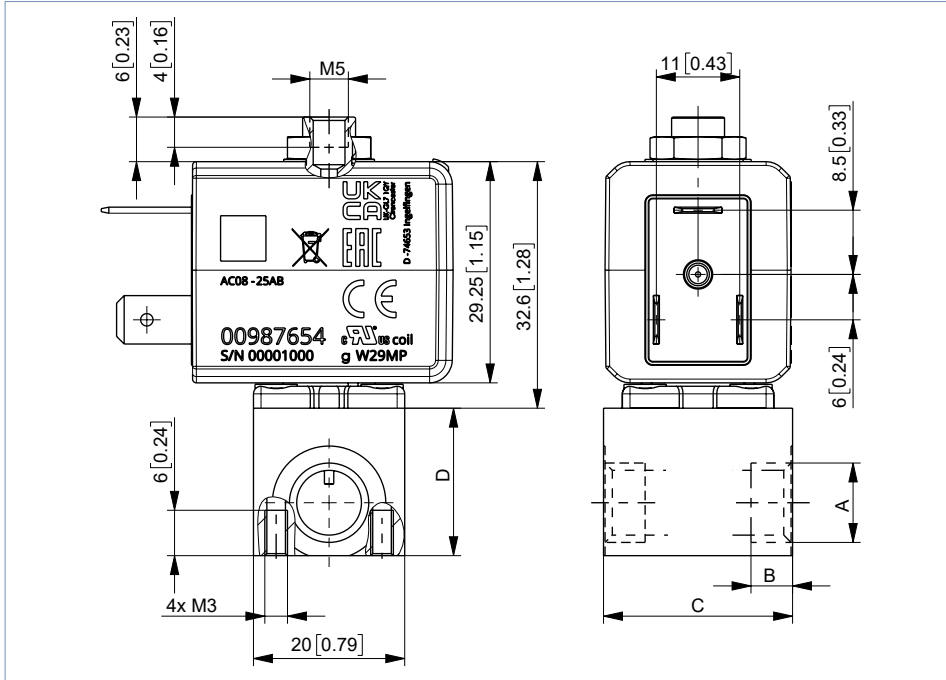
5. Dimensions

5.1. Standard version

Threaded version

Note:

- Dimensions in mm [inch]
- Versions according to industry standard form B

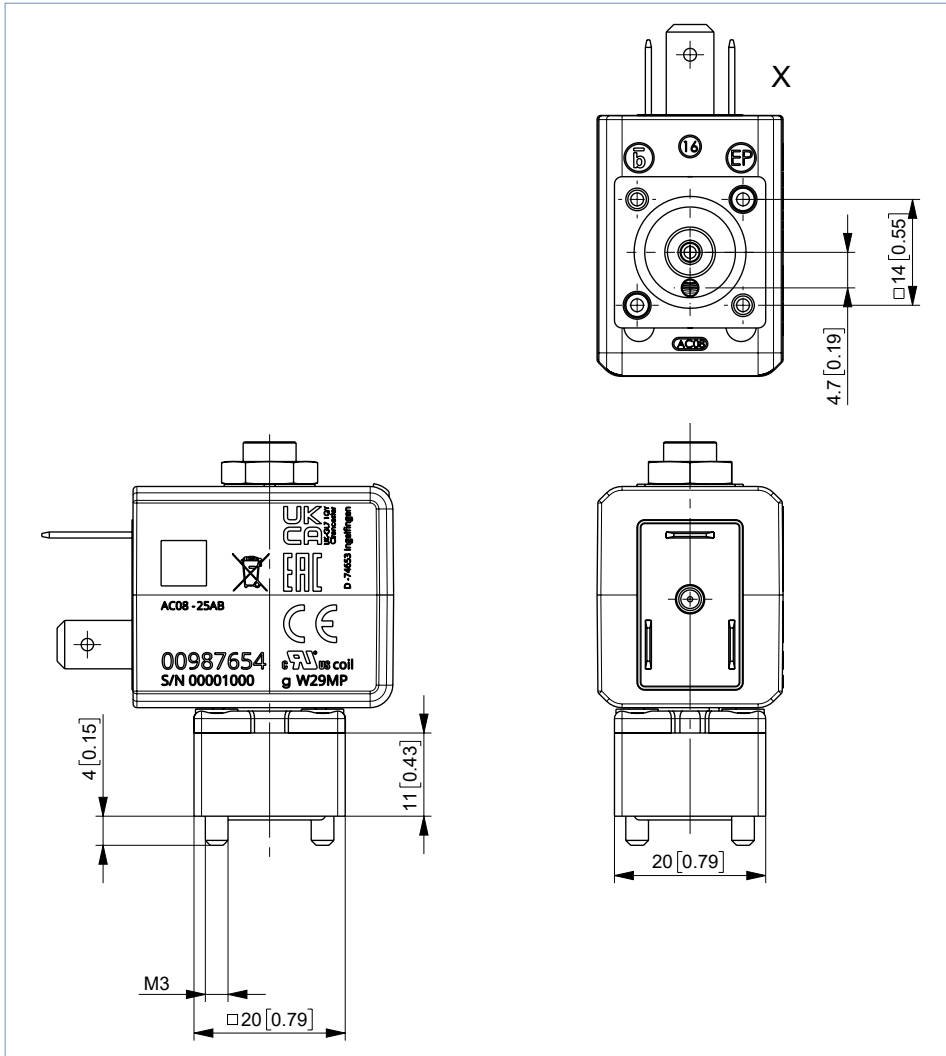


Port connection	A	B		C		D	
		[mm]	[in]	[mm]	[in]	[mm]	[in]
Thread	M5	5	0.19	20	0.78	14	0.55
Thread	G1/8	8	0.31	25	0.98	19.5	0.74

Flange version

Note:

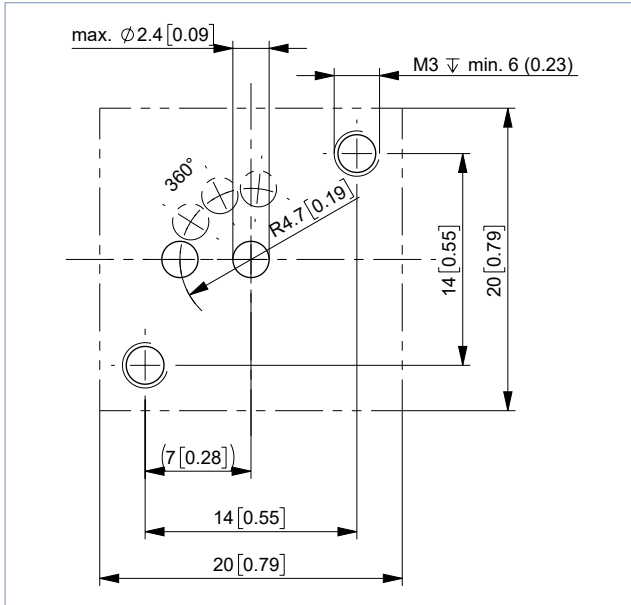
- Dimensions in mm [inch]
- Versions according to industry standard form B



Flange pattern

Note:

- Dimensions in mm [inch]
- On the connection side, the geometries are to be realised as shown in the following drawing.
- Flange version (FK01) according to FST 1000225877

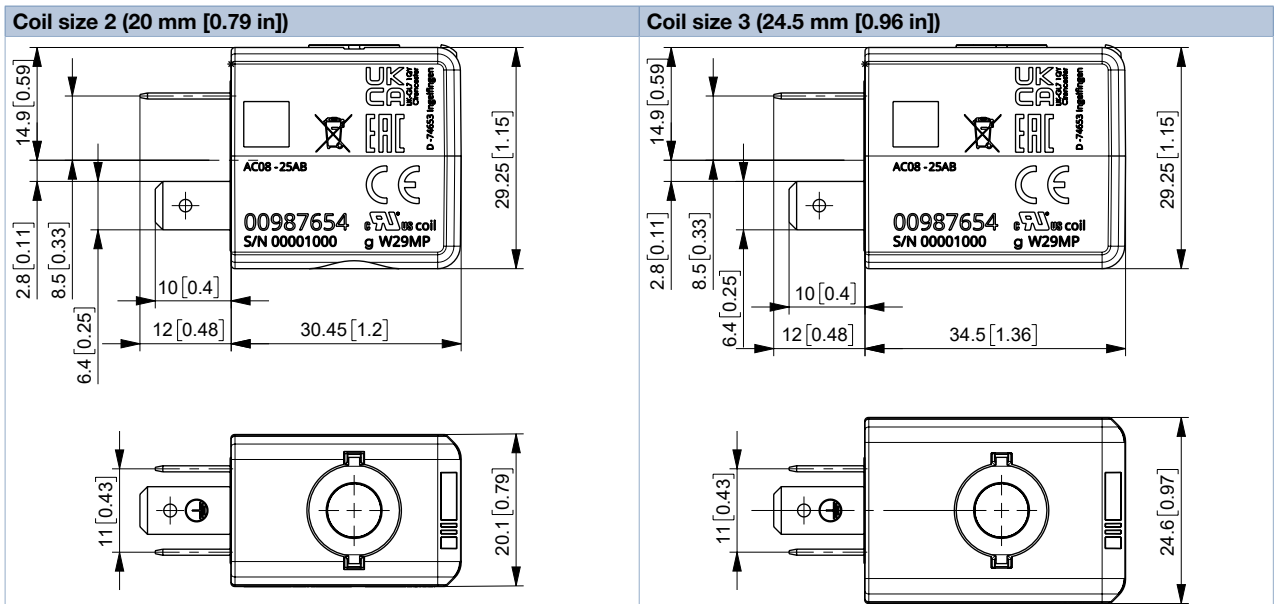


5.2. Coil versions

Versions according to industry standard form B

Note:

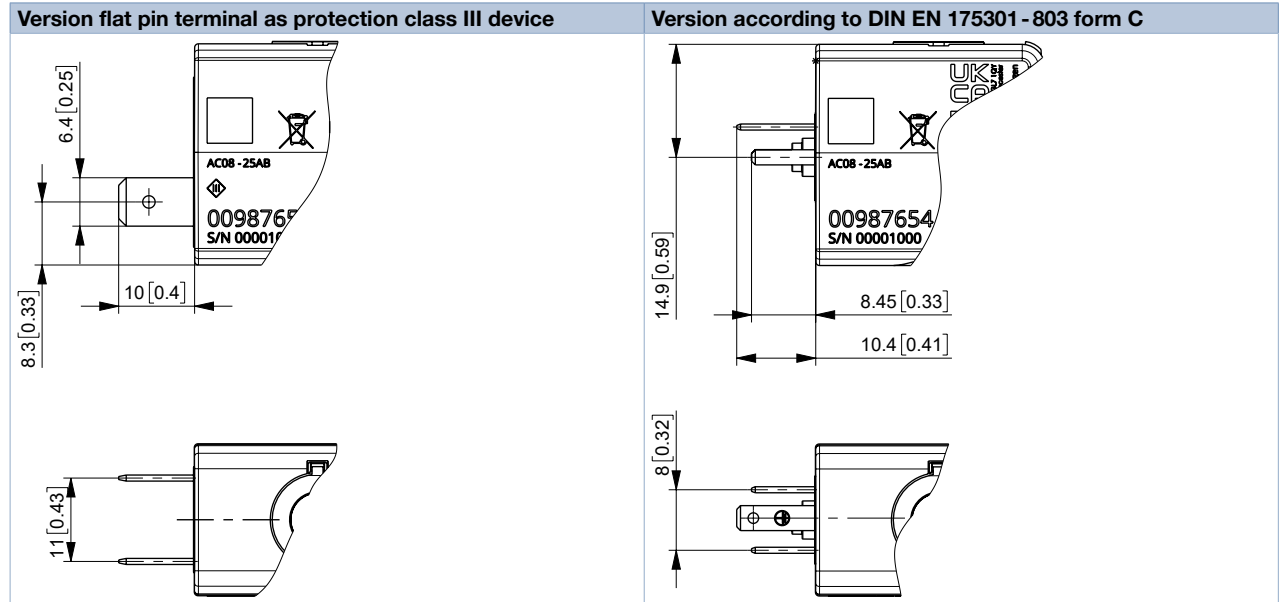
Dimensions in mm [inch]



Further electrical connections

Note:

- Dimensions in mm [inch]
- Specifications apply to coil sizes 20 mm [0.79 in] and 24.5 mm [0.96 in]

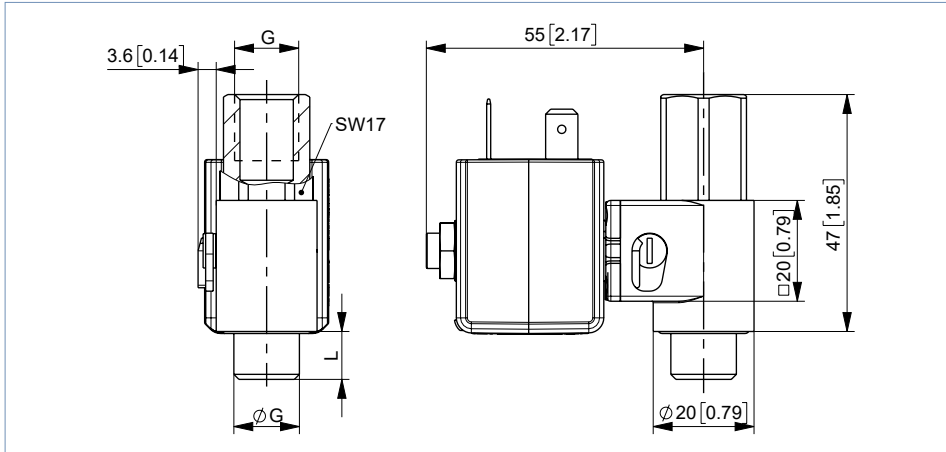


5.3. Banjo version, coil size 24.5 mm [0.96 in]

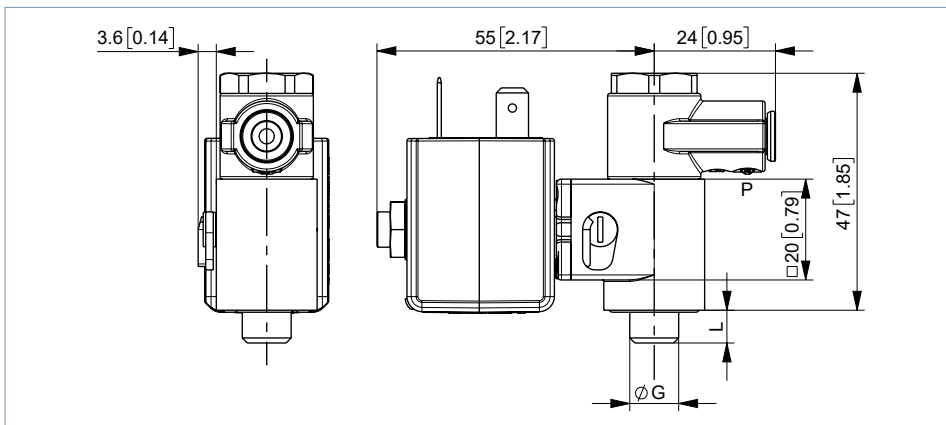
Note:

- Dimensions in mm [inch]
- Plug connection for compressed air: Pressure port P can be continuously rotated through 360°.
- Available orifices: 1.2 mm

Threaded version for compressed air



Plug connection for compressed air



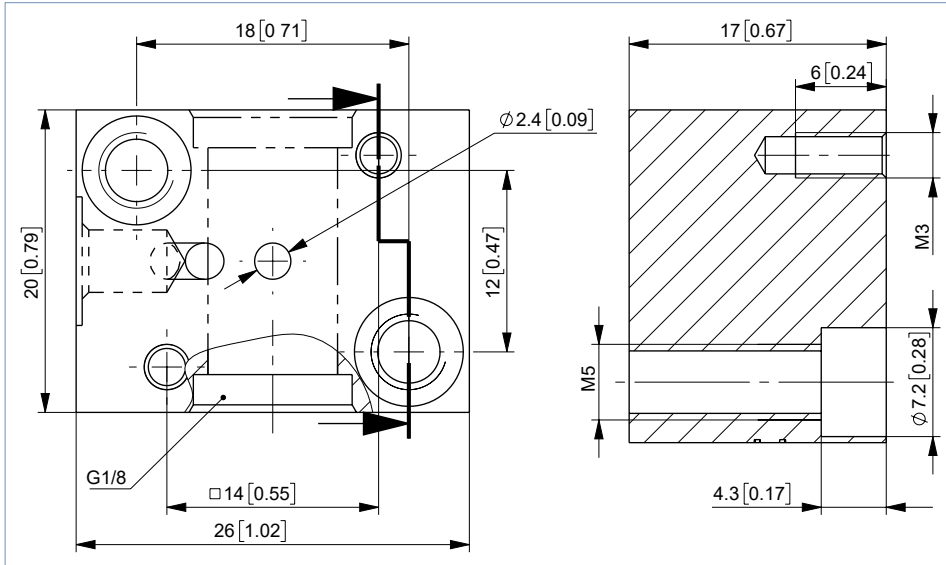
G	L		
	[Zoll]	[mm]	[in]
G 1/8		6.5	0.25
G 1/4		9.5	0.37

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5.4. Single manifold

Note:

- Dimensions in mm [inch]
- Can only be combined with valves with coil size 20 mm [0.79 in]
- Manifolds with valves of coil size 24.5 mm [0.96 in] on request

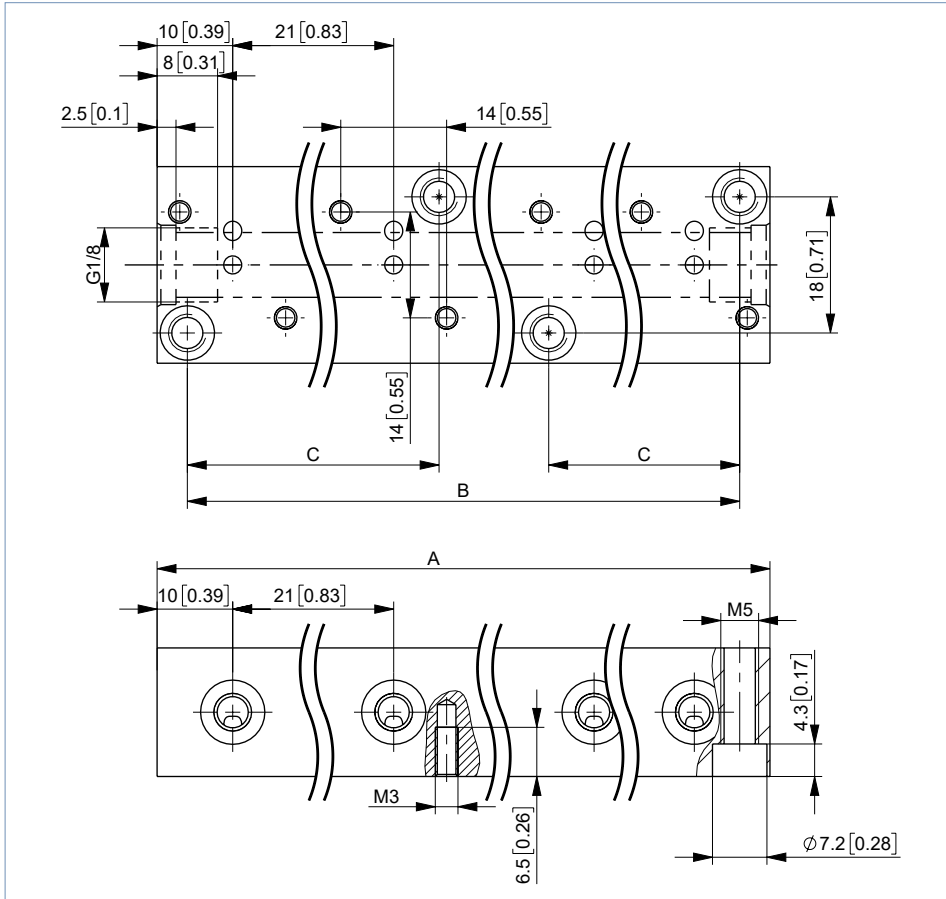


Quantity of valve places	A		B		C		Article no.
	[mm]	[in]	[mm]	[in]	[mm]	[in]	
1	20	0.78	12	0.47	-	-	005312

5.5. Multiple manifold

Note:

- Dimensions in mm [inch]
- Can only be combined with valves with coil size 20 mm [0.79 in]
- Manifolds with valves of coil size 24.5 mm [0.96 in] on request



Quantity of valve places	A		B		C		Article no.
	[mm]	[in]	[mm]	[in]	[mm]	[in]	
2	41	1.61	33	1.29	-	-	005355
3	62	2.44	54	2.12	-	-	005313
4	83	3.26	75	2.95	-	-	005314
5	104	4.09	96	3.77	-	-	005315
6	125	4.92	117	4.6	-	-	005316
7	146	5.74	138	5.43	-	-	005893
8	167	6.57	159	6.25	54	2.12	005166
9	188	7.4	180	7.08	54	2.12	005241
10	209	8.22	201	7.91	75	2.95	005819
11	230	9.05	222	8.74	75	2.95	005242
12	251	9.88	243	9.56	96	3.77	005222

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6. Device/Process connections

6.1. Pin assignment

For the positions marked with *, ** or *** in the drawing, the connections are marked with the letters shown in the table above, depending on the circuit function. Unused connections in circuit functions A or B will be closed off with a blanking plug or cap nut.

Circuit function	Connection Type			Threaded version	Flange version
	*	**	***		
A	P	to lock	A		
B	to lock	B	P		
C	P	R	A		
D	R	P	B		
T	P	R	A		

7. Performance specifications

7.1. Power consumption

Standard version, coil size 24.5 mm [0.96 in]

Coil	Orifice [mm]	Electrical power					Switching times ^{1.)}	
		Inrush AC [VA]	Hold AC		DC		Opening [ms]	Closing [ms]
			[VA]	[W]	Cold [W]	Hot [W]		
24 V / DC / 7 W	1.2	–	–	–	7	5.5	8...12	8...12
	1.6							
	2.0							
24 V / DC / 5.5 W	1.2	–	–	–	5.5	4.5		
	1.6							
	2.0							
24 V / 50 Hz / 4 W	1.2	12	6.5	4	–	–		
	1.6							
	2.0							
230 V / 50 Hz / 4 W	1.2	12	6.5	4	–	–		
	1.6							
	2.0							

1.) Measurement at 87 psi^{2.)} and +68 °F at the valve outlet acc. to DIN ISO 12238:2001, opening: pressure build-up 0...10%, closing: pressure reduction 100...90%

2.) Pressure data: Overpressure to atmospheric pressure and air as a medium

Standard version, coil size 20 mm [0.79 in]

Coil	Orifice [mm]	Electrical power					Switching times ^{1.)}	
		Inrush AC [VA]	Hold AC		DC		Opening [ms]	Closing [ms]
			[VA]	[W]	Cold [W]	Hot [W]		
24 V / DC / 6.5 W	1.2	–	–	–	6.5	5	8...12	8...12
	1.6							
	2.0							
24 V / 50 Hz / 6 W	1.2	11	7	6	–	–		
	1.6							
	2.0							
230 V / 50 Hz / 6 W	1.2	11	7	6	–	–		
	1.6							
	2.0							
24 V / DC / 5 W	1.2	–	–	–	5	4		
	1.6							
	2.0							
24 V / 50 Hz / 4 W	1.2	9	5	4	–	–		
	1.6							
	2.0							
230 V / 50 Hz / 4 W	1.2	9	5	4	–	–		
	1.6							
	2.0							

1.) Measurement at 87 psi^{2.)} and +68 °F at the valve outlet acc. to DIN ISO 12238:2001, opening: pressure build-up 0...10%, closing: pressure reduction 100...90%

2.) Pressure data: Overpressure to atmospheric pressure and air as a medium

8. Ordering information

8.1. Bürkert eShop – Easy ordering and quick delivery



Bürkert eShop – Easy ordering and quick delivery

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8.2. Bürkert product filter



Bürkert product filter – Get quickly to the right product

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8.3. Ordering chart

Standard version according to industry standard form B, coil size 24.5 mm [0.96 in], coil UL Recognized (cURus)

Note:

All valves are delivered without a cable plug.

Circuit function	Port connection	Orifice	C _v value water ^{1,3)}	Voltage/ Frequency/ Power	Maximum duty cycle	Pressure range ^{2,3,4)} (MAWP ^{4,5)}		Article no.	
						Ambient temperature 167 °F	Ambient temperature 131 °F	Brass body	Stainless steel body
		[mm]	[gal/min]	[V/Hz/W]		Air + water [psi]	Air + water [psi]	FKM seal	
CF C 3/2-way solenoid valve Direct-acting Normally closed 	NPT 1/8	1.2	0.05	24 V / DC / 7 W	100 % ED	–	0...189	X	X
				24 V / DC / 5.5 W		0...167	0...167	X	X
				24 V / 60 Hz / 4 W		0...189	0...189	X	X
				120 V / 60 Hz / 4 W		0...189	0...189	X	X
				240 V / 60 Hz / 4 W		0...189	0...189	X	X
		1.6	0.07	24 V / DC / 7 W	100 % ED	–	0...109	X	X
				24 V / DC / 5.5 W		0...87	0...87	X	X
				24 V / 60 Hz / 4 W		0...109	0...109	X	X
				120 V / 60 Hz / 4 W		0...109	0...109	X	X
				240 V / 60 Hz / 4 W		0...109	0...109	X	X
		2.0 ^{5,6)}	0.13	24 V / DC / 7 W	100 % ED	–	0...102	X	X
				24 V / DC / 5.5 W		0...73	0...73	X	X
	24 V / 60 Hz / 4 W			0...87		0...87	X	X	
	120 V / 60 Hz / 4 W			0...87		0...87	X	X	
	240 V / 60 Hz / 4 W			0...87		0...87	X	X	
	Manifold (FK01)	1.2	0.05	100 % ED	24 V / DC / 7 W	–	0...189	379906 𐀀	380132 𐀀
					24 V / DC / 5.5 W	0...167	0...167	390269 𐀀	390271 𐀀
					24 V / 60 Hz / 4 W	0...189	0...189	X	X
					120 V / 60 Hz / 4 W	0...189	0...189	X	X
					240 V / 60 Hz / 4 W	0...189	0...189	X	X
		1.6	0.07	100 % ED	24 V / DC / 7 W	–	0...109	379915 𐀀	380137 𐀀
					24 V / DC / 5.5 W	0...87	0...87	390275 𐀀	390273 𐀀
					24 V / 60 Hz / 4 W	0...109	0...109	X	X
					120 V / 60 Hz / 4 W	0...109	0...109	X	X
240 V / 60 Hz / 4 W					0...109	0...109	X	X	
2.0 ^{5,6)}		0.13	100 % ED	24 V / DC / 7 W	–	0...102	X	X	
				24 V / DC / 5.5 W	0...73	0...73	X	X	
	24 V / 60 Hz / 4 W			0...87	0...87	X	X		
	120 V / 60 Hz / 4 W			0...87	0...87	X	X		
	240 V / 60 Hz / 4 W			0...87	0...87	X	X		
CF D 3/2-way solenoid valve Direct-acting Normally open 	NPT 1/8	1.2	0.05	24 V / DC / 5.5 W	100 % ED	0...145	0...145	X	X
				24 V / 60 Hz / 4 W		0...145	0...145	X	X
				120 V / 60 Hz / 4 W		0...145	0...145	X	X
				240 V / 60 Hz / 4 W		0...145	0...145	X	X
		1.6	0.07	24 V / DC / 5.5 W	100 % ED	0...87	0...87	X	X
				24 V / 60 Hz / 4 W		0...87	0...87	X	X
	2.0 ^{5,6)}	0.13	100 % ED	24 V / DC / 5.5 W	100 % ED	0...116	0...116	X	X
				24 V / 60 Hz / 4 W		0...102	0...102	X ^{6,7)}	X ^{6,7)}
				120 V / 60 Hz / 4 W		0...102	0...102	X ^{6,7)}	X ^{6,7)}
				240 V / 60 Hz / 4 W		0...102	0...102	X ^{6,7)}	X ^{6,7)}

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Circuit function	Port connection	Orifice	C _v value water ^{1.)}	Voltage/ Frequency/ Power	Maximum duty cycle	Pressure range ^{2.) 3.)} (MAWP ^{4.)})		Article no.	
						Ambient temperature 167 °F	Ambient temperature 131 °F	Brass body	Stainless steel body
		[mm]	[gal/min]	[V/Hz/W]		Air + water [psi]	Air + water [psi]	FKM seal	
CFD 3/2-way solenoid valve Direct-acting Normally open 	Manifold (FK01)	1.2	0.05	24 V / DC / 5.5 W	100 % ED	0...145	0...145	390450 𐀀	390452 𐀀
				24 V / 60 Hz / 4 W		0...145	0...145	X	X
				120 V / 60 Hz / 4 W		0...145	0...145	X	X
				240 V / 60 Hz / 4 W		0...145	0...145	X	X
		1.6	0.07	24 V / DC / 5.5 W	100 % ED	0...87	0...87	390462 𐀀	390464 𐀀
				24 V / 60 Hz / 4 W		0...87	0...87	X	X
				120 V / 60 Hz / 4 W		0...87	0...87	X	X
				240 V / 60 Hz / 4 W		0...87	0...87	X	X
		2.0 ^{5.)}	0.13	24 V / DC / 5.5 W	100 % ED	0...116	0...116	X	X
				24 V / 60 Hz / 4 W		0...102	0...102	X ^{6.)}	X ^{6.)}
				120 V / 60 Hz / 4 W		0...102	0...102	X ^{6.)}	X ^{6.)}
				240 V / 60 Hz / 4 W		0...102	0...102	X ^{6.)}	X ^{6.)}

X: on request

1.) Measurement at 14.5^{2.)} bar and + 68 °F at the valve inlet and free outlet

2.) Pressure data: Overpressure to atmospheric pressure and air as a medium

3.) Number of switching cycles under laboratory conditions (FKM seal, oiled air, unpressurised, DC): 5 million. Please note that an increase in switching pressure can limit the life of the seat seal.

4.) Maximum allowable working pressure

5.) Limited swelling compensation

6.) Can also be feasible with coil size 2

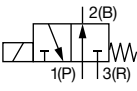
Standard version according to industry standard form B, coil size 20 mm [0.79 in], coil UL Recognized (cURus)

Note:

All valves are delivered without a cable plug.

Circuit function	Port connection	Orifice	C _v value water ¹⁾	Voltage/ Frequency/ Power	Maximum duty cycle	Pressure range ²⁾³⁾ (MAWP ⁴⁾)		Article no.				
						Ambient temperature 167 °F	Ambient temperature 131 °F	Brass body	Stainless steel body			
		[mm]	[gal/min]	[V/Hz/W]		Air + water [psi]	Air + water [psi]	FKM seal				
CF C 3/2-way solenoid valve Direct-acting Normally closed 	NPT 1/8	1.2	0.05	24 V / DC / 6.5 W	100 % ED	-	0...160	X	X			
				24 V / 60 Hz / 6 W		-	0...189	X	X			
				120 V / 60 Hz / 6 W		-	0...189	X	X			
				240 V / 60 Hz / 6 W		-	0...189	X	X			
				24 V / DC / 5 W		0...145	0...145	X	X			
				24 V / 60 Hz / 4 W		0...160	0...160	X	X			
				120 V / 60 Hz / 4 W		0...160	0...160	X	X			
				240 V / 60 Hz / 4 W		0...160	0...160	X	X			
				1.6		0.07	24 V / DC / 6.5 W	100 % ED	-	0...87	X	X
				24 V / 60 Hz / 6 W			-		0...109	X	X	
				120 V / 60 Hz / 6 W			-		0...109	X	X	
				240 V / 60 Hz / 6 W			-		0...109	X	X	
		24 V / DC / 5 W	0...80	0...80	X		X					
		24 V / 60 Hz / 4 W	0...87	0...87	X		X					
		120 V / 60 Hz / 4 W	0...87	0...87	X		X					
		240 V / 60 Hz / 4 W	0...87	0...87	X		X					
		2.0 ⁵⁾	0.13	24 V / DC / 6.5 W	100 % ED		-		0...73	X	X	
		24 V / 60 Hz / 6 W		-			0...87		X	X		
		120 V / 60 Hz / 6 W		-			0...87		X	X		
		240 V / 60 Hz / 6 W		-			0...87		X	X		
		24 V / DC / 5 W		0...58		0...58	X	X				
		24 V / 60 Hz / 4 W		0...80		0...80	X	X				
		120 V / 60 Hz / 4 W		0...80		0...80	X	X				
		240 V / 60 Hz / 4 W		0...80		0...80	X	X				
	Manifold (FK01)	1.2		0.05		24 V / DC / 6.5 W	100 % ED	-	0...160	X	X	
	24 V / 60 Hz / 6 W					-		0...189	X	X		
	120 V / 60 Hz / 6 W					-		0...189	X	X		
	240 V / 60 Hz / 6 W					-		0...189	X	X		
	24 V / DC / 5 W		0...145		0...145	X		X				
	24 V / 60 Hz / 4 W		0...160		0...160	X		X				
	120 V / 60 Hz / 4 W		0...160		0...160	X		X				
	240 V / 60 Hz / 4 W		0...160		0...160	X		X				
	1.6		0.07		24 V / DC / 6.5 W	100 % ED		-	0...87	X	X	
	24 V / 60 Hz / 6 W				-			0...109	X	X		
	120 V / 60 Hz / 6 W				-			0...109	X	X		
	240 V / 60 Hz / 6 W				-			0...109	X	X		
24 V / DC / 5 W	0...80	0...80		X	X							
24 V / 60 Hz / 4 W	0...87	0...87		X	X							
120 V / 60 Hz / 4 W	0...87	0...87		X	X							
240 V / 60 Hz / 4 W	0...87	0...87		X	X							
2.0 ⁵⁾	0.13	24 V / DC / 6.5 W		100 % ED	-		0...73	X	X			
24 V / 60 Hz / 6 W		-			0...87		X	X				
120 V / 60 Hz / 6 W		-			0...87		X	X				
240 V / 60 Hz / 6 W		-			0...87		X	X				
24 V / DC / 5 W		0...58	0...58		X	X						
24 V / 60 Hz / 4 W		0...80	0...80		X	X						
120 V / 60 Hz / 4 W		0...80	0...80		X	X						
240 V / 60 Hz / 4 W		0...80	0...80		X	X						

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Circuit function	Port connection	Orifice	C _v value water ^{1.)}	Voltage/ Frequency/ Power	Maximum duty cycle	Pressure range ^{2.)3.)} (MAWP ^{4.)})		Article no.	
						Ambient temperature 167 °F	Ambient temperature 131 °F	Brass body	Stainless steel body
		[mm]	[gal/min]	[V/Hz/W]		Air + water [psi]	Air + water [psi]	FKM seal	
CFD 3/2-way solenoid valve Direct-acting Normally open 	NPT 1/8	1.2	0.05	24 V / DC / 5 W	100 % ED	0...145	0...145	X	X
				24 V / 60 Hz / 4 W		0...145	0...145	X	X
				120 V / 60 Hz / 4 W		0...145	0...145	X	X
				240 V / 60 Hz / 4 W		0...145	0...145	X	X
		1.6	0.07	24 V / DC / 5 W	100 % ED	0...87	0...87	X	X
				24 V / 60 Hz / 4 W		0...87	0...87	X	X
				120 V / 60 Hz / 4 W		0...87	0...87	X	X
				240 V / 60 Hz / 4 W		0...87	0...87	X	X
		2.0 ^{5.)}	0.13	24 V / DC / 6.5 W	100 % ED	–	0...116	X	X
				24 V / DC / 5 W		0...87	0...87	X	X
				24 V / 60 Hz / 4 W		0...102	0...102	X	X
				120 V / 60 Hz / 4 W		0...102	0...102	X	X
	Manifold (FK01)	1.2	0.05	100 % ED	24 V / DC / 5 W	0...87	0...87	X	X
					24 V / DC / 5.5 W	0...6	0...6	X	X
					24 V / 60 Hz / 4 W	0...87	0...87	X	X
					120 V / 60 Hz / 4 W	0...87	0...87	X	X
		1.6	0.07	100 % ED	24 V / DC / 5 W	0...87	0...87	X	X
					24 V / 60 Hz / 4 W	0...87	0...87	X	X
					120 V / 60 Hz / 4 W	0...87	0...87	X	X
					240 V / 60 Hz / 4 W	0...87	0...87	X	X
2.0 ^{5.)}		0.13	100 % ED	24 V / DC / 6.5 W	–	0...116	X	X	
				24 V / DC / 5 W	0...87	0...87	X	X	
				24 V / 60 Hz / 4 W	0...102	0...102	X	X	
				120 V / 60 Hz / 4 W	0...102	0...102	X	X	
240 V / 60 Hz / 4 W		0.13	100 % ED	240 V / 60 Hz / 4 W	0...102	0...102	X	X	

X: on request

1.) Measurement at 1^{2.)} bar and +20 °C at the valve inlet and free outlet

2.) Pressure data: Overpressure to atmospheric pressure and air as a medium

3.) Number of switching cycles under laboratory conditions (FKM seal, oiled air, unpressurised, DC): 5 million. Please note that an increase in switching pressure can limit the life of the seat seal.

4.) Maximum allowable working pressure

5.) Limited swelling compensation

Banjo version, coil size 24.5 mm [0.96 in], coil UL Recognized (cURus)

Note:

All valves are delivered without a cable plug.

Circuit function	Port connection	Orifice	Q _{Nn} value air	Voltage/Frequency/ Power	Maximum duty cycle	Medium pressure ^{1,2)} (MAWP ³⁾)	Article no.
		[mm]	[gal/min]	[V/Hz/W]		Ambient temperature + 104 °F	
						Air	FKM seal
						[psi]	
CF C 3/2-way solenoid valve Direct-acting Normally closed 	BJ03 P: NPT ¼ A: G ½	1.2	1.7	24 V / DC / 7 W	100 % ED	0...189	390855 ☒
				24 V / DC / 5.5 W		0...167	390858 ☒
				24 V / 60 Hz / 4 W		0...189	X
				120 V / 60 Hz / 4 W		0...189	X
				240 V / 60 Hz / 4 W		0...189	X
	BJ07 P: NPT ⅛ A: G ⅛	1.2	1.7	24 V / DC / 7 W	100 % ED	0...189	390864 ☒
				24 V / DC / 5.5 W		0...167	390867 ☒
				24 V / 60 Hz / 4 W		0...189	X
				120 V / 60 Hz / 4 W		0...189	X
				240 V / 60 Hz / 4 W		0...189	X
	BJ08 P: Hose connection 6 mm A: G ⅛	1.2	1.7	24 V / DC / 7 W	100 % ED	0...189	390875 ☒
				24 V / DC / 5.5 W		0...167	390880 ☒
				24 V / 60 Hz / 4 W		0...189	X
				120 V / 60 Hz / 4 W		0...189	X
				240 V / 60 Hz / 4 W		0...189	X
	BJ09 P: Hose connection 6 mm A: G ¼	1.2	1.7	24 V / DC / 7 W	100 % ED	0...189	390894 ☒
24 V / DC / 5.5 W				0...167		390905 ☒	
24 V / 60 Hz / 4 W				0...189		X	
120 V / 60 Hz / 4 W				0...189		X	
240 V / 60 Hz / 4 W				0...189		X	
BJ10 P: NPT ¼ A: G ¼	1.2	1.7	24 V / DC / 7 W	100 % ED	0...189	390916 ☒	
			24 V / DC / 5.5 W		0...167	390918 ☒	
			24 V / 60 Hz / 4 W		0...189	X	
			120 V / 60 Hz / 4 W		0...189	X	
			240 V / 60 Hz / 4 W		0...189	X	

X: on request

1.) Pressure data: Overpressure to atmospheric pressure and air as a medium

2.) Number of switching cycles under laboratory conditions (FKM seal, oiled air, unpressurised, DC): 5 million. Please note that an increase in switching pressure can limit the life of the seat seal.

3.) Maximum allowable working pressure

Additional options

Note:

Available on request

Option	Variable Code	Description
Oxygen versions	NL02	Suitable for applications with oxygen (non-metal materials that are in contact with the medium are tested and approved according to BAM)
Increased purity requirements e.g. oil, grease and silicone-free	NL50/NL05	Wetted parts are specially cleaned and packaged in accordance with the valves
Increased tightness requirements	PC05	Leakage rate *less than 10 ⁻⁴ mbar l/sec
	PC08	Leakage rate *less than 10 ⁻⁵ mbar l/sec
	PC06	Leakage rate *less than 10 ⁻⁶ mbar l/sec
Vacuum version	on request	-

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8.4. Ordering chart accessories

Single manifold

Note:

Detailed ordering information can be found in chapter [“5.4. Single manifold”](#) on page 12.

Multiple manifold

Note:

Detailed ordering information can be found in chapter [“5.5. Multiple manifold”](#) on page 13.

Accessories for manifolds

Accessory	Features	Article no.
Screw plug	With sealing ring, G 1/8	005041
Cover plate	For unoccupied valve position	005100

Cable plug Type 2516, form C according to DIN EN 175301 - 803

Note:

- Delivery of cable plug includes a flat seal and a fixing screw.
- For further versions see data sheet [Type 2516](#) ▶.

Cable plug	Dimensions	Version	Voltage	Article no.
		Without circuitry	0...250 V AC/DC	303141
		With LED	12...24 V AC/DC	303145
		With LED and varistor	12...24 V AC/DC	303148
		With rectifier, LED and varistor	12...24 V AC/DC	303142

Cable plug Type 2507, form B according to industry standard

Note:

- Delivery of cable plug includes a flat seal and a fixing screw.
- For further versions see data sheet **Type 2507** ▶.

Cable plug	Dimensions	Version	Voltage	Article no.
		Without circuitry (standard)	2...250 V AC/DC	423845
		With LED	24 V AC/DC	423849
		With LED and free-wheeling diode	12...24 V AC/DC	423851
		With rectifier, LED and varistor	12...24 V AC/DC	423853

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